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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,859	03/01/2007	Walter Viegner JR.	102475.57672US	8826
23911	7590	01/07/2009	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			JENNINGS, STEPHANIE M	
		ART UNIT	PAPER NUMBER	
		4135		
		MAIL DATE	DELIVERY MODE	
		01/07/2009	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/580,859	VIEGNER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	STEPHANIE JENNINGS	4135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 March 2007.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 9-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 9-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 26 May 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20060526</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "7" and "8" have both been used to designate cylindrical part of 1, reference characters "7'" and "8'" have both been used to designate cylindrical part of 2, reference characters "7''" and "8''" have both been used to designate cylindrical part of 3, reference characters "5" and "6" have both been used to designate conical part of 1, reference characters "5'" and "6'" have both been used to designate conical part of 2, reference characters "5''" and "6''" have both been used to designate conical part of 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: A. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement

drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 20 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It is unclear whether claim 20 limits the method or apparatus claims. The preamble states "an apparatus as defined in claim 15", but claim 15 is claim for a "method as defined in claim 11."

### ***Specification***

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because use of legal terminology of "said".

Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Regarding claim 9, the phrase "at least" in line 5 of claim 9 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

8. Regarding claim 13, the phrase "at least" in line 4 of claim 13 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

9. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the term "substantially" renders the claim indefinite as it is a subjective term and does not clearly define what constitutes a "substantially cylindrically structured upsetting device" or a "substantially radial extending annular device."

***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined

application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claim 9 is rejected on the ground of nonstatutory double patenting over claim 1 of U. S. Patent No. 6,843,096 B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: a process for producing press fittings via use of an expansion tool via axial expansion with a mandrel. The socket formed in the instant application can be read as a type of press fitting.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968).

See also MPEP § 804.

#### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

13. Claims 9, 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Viegener et al. US Patent Application Publication No. 2004/0003645 A1 (included in IDS)

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

#### 14. Viegener anticipates:

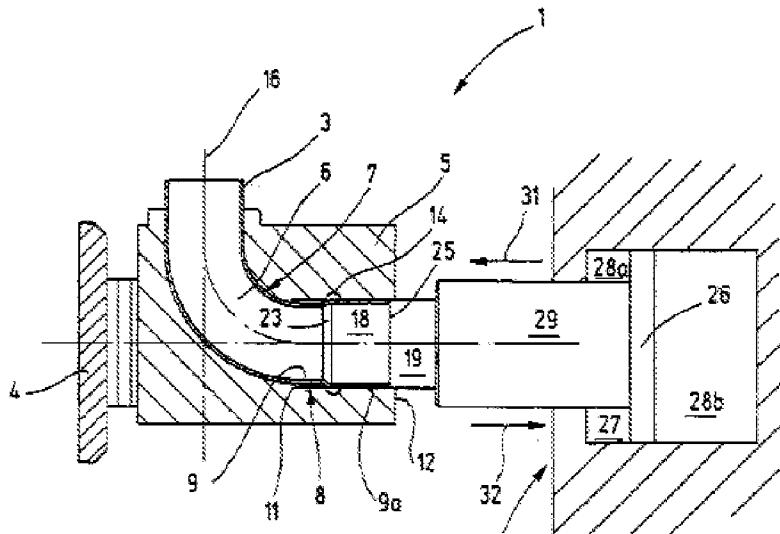


Fig. 1

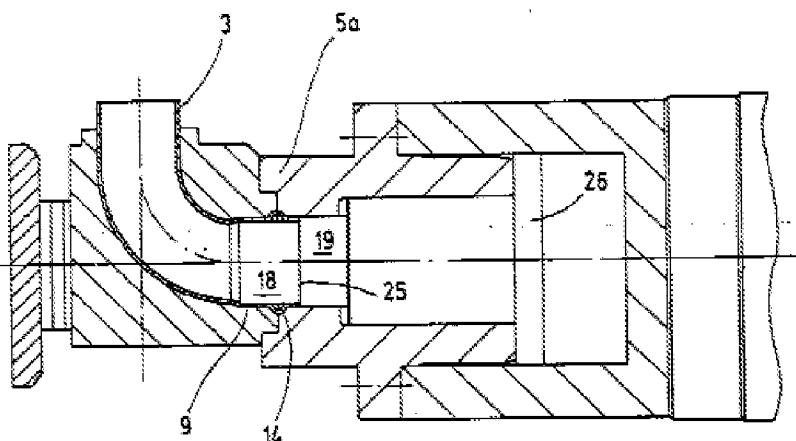


Fig.7

15. Limitations from claim 9, a method of making a socket on a pipe made of copper, by an at least single-step expansion of a pipe end with a large jump in diameter, comprising: introducing an expansion tool (18, 19, 21, 5, figure 1) axially into the pipe end (9), and at least partially upsetting a region to be expanded of the pipe end simultaneously with and/or

subsequently to introduction of the expansion tool into the pipe end by a force applied axially to the pipe end while limiting an outer diameter of the pipe end to be processed by at least one shaping shoe (5) at least partially surrounding the pipe end (page 1, paragraphs 3 and 10, page 2, paragraphs 11-12, and page 3, paragraph 34).

16. The examiner notes that the applicant has drafted the claim with the use of “or” in line 1-2 and “and/or” in line 6. The examiner is tasked with reading the claims broadly and by reading the disjunctive connectors, only one of the alternatives in the claim need to be met in order to reject the claim limitation. Disjunctive connectors will be treated the same way in following claims.

17. Examiner must give claims their broadest reasonable interpretation, MPEP §2111, “During patent examination, the pending claims must be ‘given the broadest reasonable interpretation consistent with the specification.’ Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified, *In re Pratter*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969), *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).” Also see *In re Zletz*, 13 USPQ 2d. 1320 (Fed. Cir. 1989).

18. Limitations from claim 16, an apparatus for making a socket on a pipe end, comprising: an expansion tool which is axially introducible into the pipe end and which has one or more conical and cylindrical parts (8, figure 1) adapted to determine a subsequent inner diameter of the pipe end, at least one shaping shoe (5) having conical and cylindrical parts adapted to determine a subsequent outer diameter of the pipe end, and a substantially cylindrically structured upsetting

device (8, figure 1) having a smallest inner diameter which corresponds, with necessary play, to a maximum outer diameter of the expansion tool and a substantially radially extending annular shoulder which is pressable axially against an end face of the pipe end during an upsetting step (page 1, paragraphs 3 and 10, page 2, paragraphs 11-12, and page 3, paragraph 34).

19. Limitations from claim 17, the apparatus as defined in claim 16, wherein, on its side oriented toward the pipe end (9), the expansion tool has a cylindrical part which adjoins the shoulder and having an inner diameter which determines the greatest diameter of that enlarged outer diameter of a cylindrical part of the pipe end which is reached after the upsetting step (page 2, paragraph 16).

20. Limitations from claim 18, the apparatus as defined in claim 17, wherein the inner diameter of the cylindrical part (8, figure 1) corresponds to a maximum inner diameter of the at least one shaping shoe (5, figure 1) (page 2, paragraph 16).

21. Limitations from claim 19, the apparatus as defined in claim 17, wherein an axial length of the cylindrical part (8, figure 1) is greater than or equal to a length of a cylindrical part of a shaping shoe (5, figure 1) which has a largest inner diameter (page 2, paragraph 17).

22. Limitations from claim 20, the apparatus as defined in claim 15, wherein an axial length of the cylindrical part (3, figure 1) is greater than or equal to a length of a cylindrical part of a shaping shoe (5, figure 1) which has a largest inner diameter (page 2, paragraph 17).

***Claim Rejections - 35 USC § 103***

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

24. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

25. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

26. Claims 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viegener as applied to claim 9 above, and further in view of Johnson et al. US Patent No. 4,768,369.

27. Viegener teaches a method of forming a copper press fitting via a widening mandrel, but does not teach inwardly flanged upset pipe ends. Johnson, however, does.

28. Johnson teaches:



FIG. 1

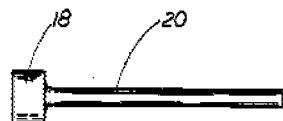


FIG. 2



FIG. 3

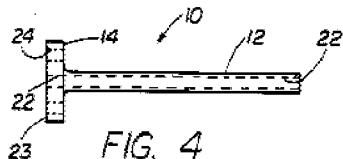


FIG. 4

29. Limitations from claim 10, the method as defined in claim 9, wherein, in case of a multi-step expansion of the pipe end, only the region of the pipe end (18) to be expanded is upset (column 1, lines 31-43 and figures 1-4 above).

30. Limitations from claim 11, the method as defined in claim 9, wherein the region of the pipe end to be expanded (18) is upset to such an extent that the wall thickness is increased in the upset portion up to the wall thickness of the rest of the pipe or at least up to the wall thickness of the previously expanded portion (column 1, lines 31-43 and figures 1-4 above).

31. Limitations from claim 13, the method as defined in claim 10, wherein the region of the pipe end (18) to be expanded is upset to such an extent that the wall thickness is increased in the

upset portion up to the wall thickness of the rest of the pipe or at least up to the wall thickness of the previously expanded portion (column 1, lines 31-43 and figures 1-4 above).

32. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Johnson's invention with Viegener's invention because increasing the wall thickness of the portion to be expanded reduces stress in the upsetting portion and decreases the likelihood of material failure during machining.

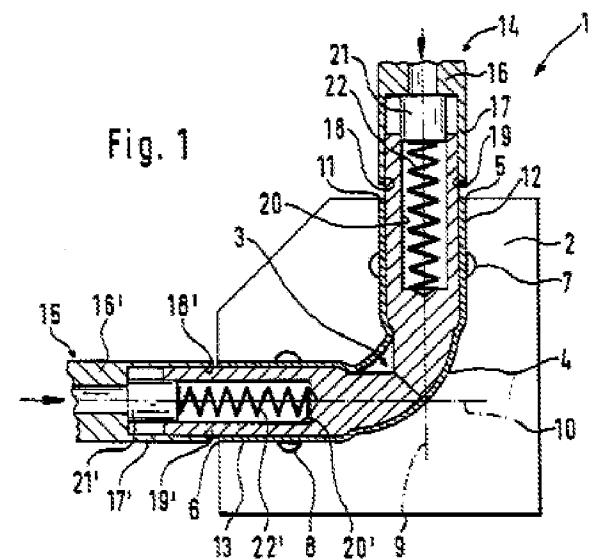
33. Claims 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viegener as applied to claim 9 above, and further in view of Viegener et al. US Patent No. 5,615,481.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the

reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C.

103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

34. Viegener teaches:



35. Limitations from claim 12, the method as defined in claim 9, wherein the upset pipe ends (12, 13, figure 1) are inwardly flanged for receiving sealing elements (93b, figure 1) (column 1, line 62-column 2, line 5).

36. Limitation from claim 14, the method as defined in claim 10, wherein the upset pipe ends (12, 13, figure 1) are inwardly flanged for receiving sealing elements (93b, figure 1) (column 1, line 62-column 2, line 5).

37. Limitations from claim 15, the method as defined in claim 11, wherein the upset pipe ends (12, 13, figure 1) are inwardly flanged for receiving sealing elements (93b, figure 1) (column 1, line 62- column 2, line 5).

38. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Viegener's invention with Viegener's invention because inwardly flanging the ends of

the upset pipe allows for easier sealing during forming and ensures a more secure seal after the sealing elements are attached.

***Conclusion***

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHANIE JENNINGS whose telephone number is (571)270-7392. The examiner can normally be reached on M-F, 7:30 am-5 pm, EST.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William M. Brewster can be reached on (571)272-1854. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J./  
Examiner, Art Unit 4135  
January 5, 2009

/William M. Brewster/  
Supervisory Patent Examiner, Art Unit 4135